Office of Oversight Review of the Occupational Medicine Program at the Savannah River Site



April 1999

Office of Environment, Safety and Health

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ACRONYMS

AAAHC Accreditation Association for Ambulatory Health Care

DOE Department of Energy

DOE/SR DOE Savannah River Operations Office

DP DOE Headquarters Assistant Secretary for Defense Programs
EM Office of the Assistant Secretary for Environmental Management

ES&H Environment, Safety, and Health

ESH&QA WSRC Environment, Safety, and Health and Quality Assurance Division

ISM Integrated Safety Management

JCAHO Joint Commission on Accreditation of Healthcare Organizations

MD Office of Fissile Materials Disposition

NN Office of Nonproliferation and National Security S/RID Standards/Requirements Identification Document

SRS Savannah River Site

WSRC Westinghouse Savannah River Company

OFFICE OF OVERSIGHT REVIEW OF THE OCCUPATIONAL MEDICINE PROGRAM AT THE SAVANNAH RIVER SITE

1.0 INTRODUCTION

This report provides site-specific results on a Department of Energy (DOE) Office of Oversight review of the occupational medicine program at the Savannah River Site (SRS). The review at SRS is one portion of an independent oversight review of occupational medicine programs across the complex. The goal of this review is to identify site-specific and DOE-wide issues that require management attention and to provide a foundation for improving occupational medicine program policy and site performance.

Background

The mission of the Office of Oversight includes evaluation and analysis of DOE policies and programs in the areas of environment, safety, health, safeguards, and security. As an important element of a DOE worker safety and health program, occupational medicine programs are included within the scope of selected Office of Oversight assessment activities.

Various Office of Oversight assessments have identified weaknesses in some aspects of occupational medicine programs at several sites. For example, an Oversight evaluation of emergency management across the DOE complex highlighted weaknesses in the interface between occupational medicine programs and emergency management programs at several sites. Because of such weaknesses, some sites may not be adequately prepared to provide timely and effective medical treatment to workers who have been injured or exposed to hazardous materials (e.g., information on the hazardous materials may not be readily available at site or local medical treatment facilities). Similarly, reviews of occupational medicine programs at individual sites during Office of Oversight safety management evaluations indicated that occupational medicine programs at some sites are not accomplishing all of their objectives.

Collectively, the assessment results indicated a need for a more comprehensive review of occupational medicine programs. Consequently, the Office of Oversight is performing a two-phase review of occupational medicine programs across the complex. The first phase of the review, encompassing three sites, was completed in November 1998. An interim report issued in January 1999 identified trends and issues that warrant additional review. In this second phase, the Office of Oversight will evaluate additional sites during calendar year 1999. A final report will be prepared after the review of the additional sites is complete.

OVERVIEW OF THE SAVANNAH RIVER SITE (SRS) AND ITS OCCUPATIONAL MEDICINE PROGRAM

Activities: Established in 1950, SRS was constructed to produce the basic materials used in the fabrication of nuclear weapons, primarily tritium and plutonium-239. Later, the mission was expanded to include the production of other special radioactive isotopes to support research in nuclear medicine, space exploration, and commercial applications. Current activities include research and development associated with nuclear materials processing, waste management and environmental restoration, safe and secure storage of special nuclear materials, and support for national security requirements. The Defense Waste Processing Facility and saltstone facility are examples of mission-supported research and technology to promote defense waste cleanup, processing, and stabilization.

Budget: SRS funding for fiscal year (FY) 1998 was \$1.4 billion. The anticipated budget for FY 1999 is about \$1.5 billion. The occupational medicine program budget for FY 98 was about \$5 million.

Site: The Savannah River Site complex covers 198,344 acres (310 square miles) and is located in South Carolina, approximately 25 miles southeast of Augusta, Georgia. The SRS facilities are dispersed throughout the site.

Staff and Visitors: As of 1998, SRS site had approximately 14,000 people, including site operating personnel and subcontractors, stationed on or near the site. There are about 520 Federal personnel employed by the DOE Savannah River Operations Office (DOE/SR).

Organizations: The lead program secretarial office for SRS is the Assistant Secretary for Environmental Management (EM). The Assistant Secretary for Defense Programs (DP), the Director of the Office of Nuclear Nonproliferation and National Security, (NN), and the Director of the Office of Fissile Materials Disposition (MD) also have programmatic interests at the site. DOE/SR has primary responsibility for safety at SRS and is responsible for providing direction to the contractor and monitoring performance.

The most recent Savannah River integrated management contract was awarded to Westinghouse Savannah River Company (WSRC) in October 1996 (WSRC has held the contract since 1989). Other contractors teamed with WSRC include B&W Savannah River Company and BNFL Savannah River Corporation. A significant number of subcontractors also support the WSRC team. In addition to the WSRC contract, SR has agreements/contracts in place with Wackenhut Services Inc., the University of Georgia, SRS Natural Resource Management and Resource Institute, and the U.S. Army Corps of Engineers.

Occupational Medicine Program: The SRS medical department was established in 1952 by the Atomic Energy Commission, while the site was under construction. WSRC has operated the medical program since 1989. WSRC merged the construction medical operations and the operations medical department into a single medical operation. The WSRC medical program currently operates five medical clinics and has 58 employees. The mission of the WSRC medical department is to provide a quality occupational health program that promotes the physical and mental well-being of its customers while maintaining medical information in a confidential, ethical, and legal manner. The vision is to be recognized by customers and peers as the leader in occupational health programs. The WSRC medical program has established principles that guide its operations. These principles include: the maintenance of standards, practice and procedures in conformance with DOE and corporate policy; provide medical treatment, consultation and emergency care for employees; assist in placement of employees without undue hazard; contribute to the maintenance of good physical and mental health; and foster teamwork through complete communication with the customer.

Approach and Methodology

In reviewing occupational medicine programs at individual sites, the Office of Oversight supplemented its internal capabilities by teaming with licensed medical physicians who specialize in occupational medicine. To obtain such expertise, the Office of Oversight teamed with the Accreditation Association for Ambulatory Health Care (AAAHC) to perform the review.

The AAAHC is a professional organization that performs surveys of medical clinics and accredits programs that have demonstrated compliance with an established set of nationally recognized standards. As part of the teaming agreement, the AAAHC supplied certified surveyors to supplement the Oversight team in the evaluation of the WSRC occupational medicine program.

The AAAHC participation on this review served two purposes:

- The AAAHC performed an independent survey of the WSRC occupational medicine program according to their established procedures and standards. As part of this effort, the WSRC medical staff completed a self-assessment (called a pre-review survey in the AAAHC process) against the AAAHC standards. WSRC can use the AAAHC evaluation to seek accreditation and determine the status of their medical program against national standards. It also provides WSRC with AAAHC's suggestions for improvements and provides for an initial assessment of the efforts that WSRC would need to perform if WSRC decides to seek continuing accreditation.
- The positive attributes, weaknesses, and insights from the AAAHC survey were factored into the Oversight evaluation of occupational medicine program performance. The insights from professional AAAHC surveyors were considered, in combination with other information gathered by the Office of Oversight team during interviews and tours. In this manner, the AAAHC survey was an important component of the Office of Oversight evaluation of the effectiveness of the WSRC occupational medicine program with respect to current DOE policy and requirements.

This unique approach to independent oversight provided an effective and efficient way to obtain the independent perspectives of qualified and experienced medical professionals.

Standards for the Site-Specific Review

This independent oversight review at SRS focused on the effectiveness of the DOE/SR and WSRC contractor line management in establishing and implementing an effective occupational medicine program, as defined by applicable DOE orders and policies. The DOE policies that specifically apply to the occupational medicine program are DOE Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees, and DOE Policy 450.4, Safety Management System. DOE Order 440.1A delineates the basic program elements necessary for an occupational medicine program. It requires that contractors use a graded approach to establish medical program requirements and utilizes supplemental orders and program guidance documents to establish specific medical program expectations and requirements. It is recognized that DOE/SR and WSRC have agreed to maintain the occupational medicine program requirements as established in DOE Order 5480.8A, which was the precursor to DOE Order 440.1A. DOE Policy 450.4 defines a comprehensive and coordinated program of environment, safety, and health

(ES&H) expectations and activities that are commonly referred to as integrated safety management (ISM). All site ES&H programs, including occupational medicine programs, are to be implemented within the ISM framework. Other DOE orders, such as DOE Order 151.1, Comprehensive Emergency Management Systems, include requirements related to elements of the occupational medicine programs.

In reviewing occupational medicine programs across the DOE complex, the DOE Office of Oversight asked the AAAHC to help identify medical program elements that are essential for high-quality patient care and measure program effectiveness against nationally recognized standards. DOE Headquarters Office of Occupational Medicine supports the accreditation process and is in the process of modifying DOE Order 440.1A to be more consistent with accreditation provisions and guidelines. Although not currently a specific requirement of DOE policy or the WSRC contract, the AAAHC standards generally reflect the philosophy outlined in DOE safety management policies and are relevant to all DOE sites. The AAAHC standards emphasize the quality improvement process, which is a central theme of ISM.

Focus of the Review

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions, as delineated in Figure 1. The Office of Oversight review team focused on the site's ability to accomplish each of the listed functions. Section 2.0 of this report identifies positive attributes, issues requiring attention, and conclusions regarding the overall effectiveness of the WSRC occupational medicine program in meeting its objectives. Section 3.0 presents opportunities for improving the current program.

OCCUPATIONAL MEDICINE PROGRAM FUNCTIONS

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions:

- Clinical services. Onsite medical staff perform various routine medical procedures (e.g., physical examinations, laboratory testing) to identify and treat occupational illness or injuries, facilitate recovery and safe return to work, and refer patients for further treatment as indicated. In this regard, the occupational medicine program serves as an onsite clinic and provides timely and convenient access to medical services. In some cases, access to subsidized health services is part of employee benefits packages.
- Assess worker fitness for duty. Health evaluations are conducted to provide initial and continuing assessment of employee fitness for duty through the following examination categories: preplacement, periodic (qualification certification) examinations, return to work, job transfer, and termination.
- Medical surveillance. DOE sites often involve hazardous materials, and the work at DOE sites can involve potentially hazardous conditions. As a result, DOE sites need to identify job categories that could involve specific radiological, chemical, biological, or physical hazards and establish a process for routine health examinations and monitoring of employees in such categories. Such a process needs to be coordinated so that the information collected is useful and available to examiners and analyzed to ensure that safety and health management has the necessary information to identify trends, protect employees, respond to requests for information from individuals and stakeholders, and ensure that accurate information is available to ensure the adequacy of the health protection program.
- Support for site efforts to monitor and control exposure to radiation and hazardous materials. DOE sites must monitor and control radiation exposure in accordance with a radiation protection plan. Such efforts often require various methods for measuring radiation exposure (e.g., whole body counts) that may be performed on a routine basis or to determine the extent of exposure or appropriate medical treatment after an incident. Similarly, DOE sites must comply with various Federal and state regulations related to worker safety and hazardous materials (e.g., Occupational Safety and Health Administration requirements for protection against exposure to hazardous substances). The occupational medicine program must coordinate with other site organizations to ensure that site hazards are identified and that appropriate measures to mitigate hazards are in place.
- Support for emergency management preparedness and response. DOE sites must be prepared to handle emergencies and unplanned releases of radioactive or hazardous materials. Occupational medicine programs need to be able to provide support during an emergency situation; for example, by providing treatment to injured workers, coordinating support with local hospitals, ensuring that information about hazardous materials is readily available to medical personnel who treat exposure victims, and providing recommendations for protecting the public.
- Information management. To perform the functions noted above, DOE sites must maintain health information about hazardous materials and employees potentially exposed to those hazards. Many of the materials used at DOE facilities and laboratories, such as plutonium and beryllium, pose significant health risks and are not commonly encountered in general industry. Thus, they may be unfamiliar to community health care providers in the event of an accidental exposure. Occupational medicine program personnel must also be involved in keeping track of the types of hazardous materials at the site and their health effects, documenting worker exposures, recommending treatments, and informing management about the effectiveness of safety and health programs.

Figure 1. Functions of a Comprehensive Occupational Medicine Program

2.0 RESULTS

The following results from the SRS occupational medicine program review are a combination of the AAAHC survey findings, which determine compliance with national ambulatory health care standards, and the Office of Oversight review, which determines the effectiveness of DOE contractor occupational medicine programs. Both reviews reflect the principles of ISM, including: identification of roles, responsibilities, and accountabilities; identification of requirements; quality management and improvement; and performance assessment and feedback mechanisms to promote continuous improvement. The Office of Oversight will consolidate these results and the results from the reviews at other sites in a final report that will identify generic issues. These generic issues are intended to help improve the DOE contractor occupational medicine programs and DOE program and field office management and direction of contractor activities.

Positive Attributes

- 1. The Standards/Requirements Identification Document (S/RID) process at SRS has successfully identified and communicated DOE contractor occupational medicine program requirements. A formal system is in place for DOE/SR and WSRC to review medical program requirements and standards. The system is able to determine the applicability of requirements as they are introduced into the safety and health management system. Medical program requirements are further communicated through the Annual Operations Plan review process.
- 2. The medical staff and ES&H management have established effective lines of communication and are cooperating to exchange information. The WSRC Medical Director and his staff have established formalized lines of communication, including regularly scheduled meetings and reports with senior Environment, Safety, and Health management from both DOE/SR and WSRC. The medical department and ES&H staff also participate on joint projects. DOE/SR, through the safety division, regularly communicates with the WSRC medical department management to monitor the operations plan, monitor all health-related issues, track financial obligations, and facilitate the transfer of information from a variety of sources (including DOE Headquarters). The organizational alignment of the WSRC Environment, Safety, and Health and Quality Assurance (ESH&QA) Division, which includes the medical department and safety and health personnel, is set up to facilitate communication between the various organizational elements responsible for the safety and health of employees.
- 3. The WSRC occupational medicine program achieved compliance with most AAAHC standards. The AAAHC survey determined that the WSRC occupational medicine program was substantially compliant in seven of 13 standards that were applicable to the occupational health services provided by the WSRC clinics and was partially compliant in five of 13 standards. The quality management and improvement standard, which was rated as non-compliant, is expected to improve as the quality improvement and peer review programs mature. Physician participation in quality management activities will enhance the medical quality management and improvement program. The clinic self-assessment program was comprehensive. Medical records, quality of care provided, clinical records, professional improvement, immediate/urgent care services, pharmacy services, pathology and medical laboratory services, and diagnostic imaging were noted to be substantially

compliant with AAAHC standards. The AAAHC surveyors indicated that the WSRC medical program was positioned to obtain accreditation in 12 to 18 months.

Weaknesses and Issues Requiring Attention

- 1. The integration of occupational medicine program services with line management is not clearly documented or referenced in site ISM documents. The WSRC/ESH&QA Division has systems in place to identify hazards and establish work controls through the "Work Clearance Permit" process. The permit process is reviewed by supervisors, workers, and safety professionals. It is comprehensive and provides sufficient information to screen for most hazardous work situations. The job hazard analysis procedure also provides safety information for routine and repetitive tasks. The occupational medicine program relies on the safety professionals and technicians (including industrial hygiene, health physics, and safety staff) to identify and monitor workers who could be exposed to hazards at work sites. The occupational medicine program further relies on safety personnel to identify individuals that require medical surveillance or special medical examinations. Interviews indicate that these processes are understood by SRS personnel and are being implemented. However, the process is not well documented and is not specifically included in the ISM development and implementation documents. Currently, the ISM documents do not include specific references to requirements for line management to provide hazard information to the medical department and contribute to summaries of worker exposure histories. The ISM documents do not adequately identify methods to validate and communicate such information so that it can be used in medical evaluations and worker exposure histories. The worker protection team concept does not include effective methods to report potential health effects for individuals potentially exposed to hazards, and does not have a defined mechanism to access medical assistance if it is required. Line management and supervisor involvement is essential to effectively implement the requirements for job task analysis, hazard information, and summaries of worker exposure information. In addition, line management must be aware of DOE requirements to provide this important information to the medical program. Currently, the processes are not adequately formalized and rely too heavily on individual initiative rather than clearly documented requirements.
- 2. The WSRC performance assessment programs do not adequately review some key elements of the occupational medicine program. The WSRC self-assessment program for the occupational medicine clinic is comprehensive and addresses most internal functions performed by the medical staff. Similarly, other WSRC assessment programs have reviewed internal medical department procedures, training, and operational functions. However, the requirements for management to provide information to the medical program concerning employee job tasks and hazard and exposure information are not specifically reviewed by the existing assessment efforts to ensure quality and effective performance. For example, facility-level assessments have not addressed line management responsibilities related to providing information for use by the medical program; therefore the quality and effectiveness of line management's implementation of their responsibilities has not been evaluated.
- 3. The SRS worker protection program for subcontractor services does not adequately define DOE requirements or include provisions to monitor the quality and effectiveness of occupational medicine program services for subcontractors. Protection of workers during all potentially hazardous work at DOE facilities is required by DOE Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees. Prevention of illness,

injuries and unnecessary losses is the primary objective of the order. The order requires that medical resources be established to ensure that worker fitness for duty is assessed, medical restrictions are identified and managed, injuries and illnesses are assessed, treated and reported, and medical examinations, where indicated, reflect the risks of the work being performed. The intent of this requirement is not adequately defined in the SRS subcontracting documents (i.e., the requirements are only briefly mentioned in one of three alternative worker protection checklists, which are one of the steps used to determine applicable requirements for subcontractors).

For some SRS subcontractor employees (i.e., those that perform work in areas where hazards are present but not co-located with WSRC employees), the requirements for ensuring that contractor employees have adequate occupational medical support are not clearly defined. In addition, methods to manage medical information concerning fitness for duty or medical restrictions is not part of the current work planning process. Past instances of DOE subcontractor noncompliance concerning fitness for duty evaluations and work restrictions have contributed to injuries and illnesses (e.g., cases where subcontractor employees, due to medical restrictions, should not have been working in heat stress or on scaffolding or other hazardous environments).

Methods to monitor workers (e.g., for heat stress when working in protective clothing) should be part of the safety planning process, and provisions for restricting workers should be established if they are not fit for hazardous duty. Currently, SRS does not have mechanisms to ensure the quality and effectiveness of the occupational medicine components of the subcontractor services safety program.

Conclusions

The Savannah River Site has maintained a longstanding commitment to providing a safe and healthy environment for workers and visitors. Managers and employees from both DOE/SR and WSRC effectively communicate the important role of their safety program. The DOE/SR Safety Division has maintained effective oversight of the management of the WSRC safety and health program and has systems in place to identify and communicate information, identify safety-related requirements, and prioritize projects with safety and health significance.

DOE/SR and WSRC have been generally successful in establishing an effective occupational medicine program. DOE/SR and WSRC line management and ES&H management are knowledgeable and supportive of the occupational medicine program. DOE requirements as established in DOE Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees, was formally accepted and supported by the SRS S/RID process. The AAAHC survey verified that the most of the basic elements of a quality occupational medicine program are in place. The occupational medicine program was noted to be substantially compliant in the areas of Quality of Care Provided, Clinical Records, Professional Improvement, Immediate/Urgent Care Services, Pharmaceutical Services, Pathology and Medical Laboratory Services, and Diagnostic Imaging Services. The internal clinic self-assessment and ongoing efforts to automate the department were noted as positive improvements to the program.

However, the AAAHC identified the need for additional improvements in some areas, including quality management and improvement and documentation of occupational medicine program services within the employee clinical record. In addition, the clinic self-assessment program could

be further enhanced by peer review and inclusion of the physician staff in the quality management and improvement process. Improvements are also needed to address the identified weaknesses in (1) formalizing requirements relating to line management and ES&H staff responsibilities for performing activities in support of the occupational medicine program; (2) ensuring that assessment programs adequately address line management and ES&H staff responsibilities for performing activities in support of the occupational medicine program; and (3) ensuring that occupational medicine programs adequately consider health and safety requirements for subcontractors.

3.0 OPPORTUNITIES FOR IMPROVEMENT

The potential enhancements are not intended to be prescriptive. Rather, they are intended to be reviewed and evaluated by DOE and contractor line management, and modified as appropriate to meet DOE and site-specific objectives and expectations.

- 1. DOE/SR and WSRC should ensure that requirements and responsibilities for occupational medicine programs are effective and efficient, clearly defined, and adequately documented in site-specific directives, including ISM policies and procedures. A comprehensive occupational medicine program requires the cooperative efforts of medical professionals, ES&H staff, and line management. All of these groups must work together to ensure that professional medical staff have adequate knowledge about the work site hazards, the work being performed by employees and the ability to access data concerning individuals when they are being examined. Site documentation, including ISM documentation, should clearly define requirements and responsibilities for all of these groups and should ensure that:
 - Workers and supervisors routinely review what work is being performed and what hazards may be present.
 - Supervisors and line managers develop job task analysis, hazard information, and summaries of worker exposure information.
 - Line managers provide relevant information about hazards and worker exposure to medical professionals.
 - ES&H staff conduct hazard surveys, make assessments of potential exposures, actually monitor workers if indicated and make information accessible to medical professionals.
 - Line managers, ES&H staff, and medical professionals have effective mechanisms to validate and communicate information about hazards and worker exposures.
 - Medical staff review available information and use it to focus medical evaluations of
 individual workers and provide feedback to management about the effectiveness of the
 worker protection program, for those workers covered by the medical program.
 - Where medical services are provided by subcontractors, site ES&H management should evaluate the adequacy of medical services provided by the subcontractor organizations to ensure that subcontractors' workers are fit for duty and receive appropriate medical monitoring.
 - The worker protection team has effective methods to report hazards, identify individuals potentially exposed to hazards, and access medical assistance when needed.

As ISM is further developed and implemented, the requirements and responsibilities for developing and sharing information about hazards and exposures should be clearly specified. DOE/SR and WSRC also should identify and evaluate options for improving processes for developing and sharing information among supervisors, line management, ES&H staff, and medical professionals. Specific items to consider include:

- Developing better methods to formalize the transfer of job hazard analysis, job task
 analysis, and employee potential work hazard history information in a manner that is more
 readily usable by the occupational medicine program.
- Continuing efforts to link the industrial hygiene and medical data systems, including efforts
 to enhance the ability for medical examiners to access individual work history and
 exposure data prior to employee examinations.
- Making better use of the worker protection teams to identify and communicate hazards in the work site.
- Increasing medical professional involvement in the process worker protection teams to
 ensure that medical professionals are knowledgeable of site hazards and that medical
 perspectives concerning health effects are considered in the work planning processes.
- 2. DOE/SR and WSRC should ensure that performance assessment and feedback programs adequately address line management's implementation of their responsibilities for occupational medicine program requirements. For an occupational medicine program to be effective, line managers and supervisors must effectively implement their responsibilities, which include identifying hazards, determining which employees could be exposed to those hazards, determining which hazards may pose health effects, and identifying employees who must participate in medical surveillance programs. The current self-assessment and DOE/SR and WSRC facility assessments programs effectively address some elements of occupational medicine programs, such as facility procedures and training, and have recently increased their focus on occupational medicine programs. However, the assessments do not fully address line management and supervisor responsibilities for interfacing with the occupational medicine program. DOE/SR and WSRC assessment programs should place more emphasis on ensuring that:
 - Occupational medicine program requirements that apply to line managers and supervisors are adequately defined.
 - Line managers and supervisors within facilities understand the functions of the occupational medicine program and their roles and responsibilities.
 - Hazards are effectively identified and workers potentially exposed to those hazards are correctly placed in medical surveillance categories.
- 3. DOE/SR and WSRC should evaluate the occupational health/medical surveillance requirements that apply to subcontractors to ensure that they provide adequate protection for subcontractor employees. DOE has a responsibility to ensure that all workers, including subcontractor employees, are fit for duty, treated properly if injury or illness occurs, and monitored properly if hazardous conditions exist. The worker protection program for subcontracted services should provide additional guidance to outline expectations for occupational medicine services within the different categories of subcontracted work. DOE/SR and WSRC should evaluate provisions applying to subcontractors and enhance them as needed to ensure that the provisions are adequate to:

- Establish clear occupational health expectations for subcontractors that perform work at SRS.
- Ensure that appropriate medical examinations are performed to verify that subcontractor workers are fit to work in hazardous conditions.
- Ensure that sufficient medical information is available to the Site Occupational Medical Director to properly evaluate and treat emergencies.
- Ensure that subcontractors provide adequate medical surveillance for workers that could be exposed to hazardous materials or conditions.
- Ensure that documentation is properly completed and accessible for future review.

DOE/SR and WSRC also need to ensure that they provide adequate monitoring and oversight of occupational medicine program elements performed by subcontractors. Past experience indicates that contractual provisions and requirements for occupational medicine are not always understood by subcontractors, particularly small subcontractors that do not have corporate experience and expertise with occupational medicine programs. DOE/SR and WSRC medical staff, ES&H staff, and procurement staff need to examine subcontractor policies and practices to verify that requirements are being correctly interpreted and effectively implemented.

APPENDIX A

ACCREDITATION ASSOCIATION FOR AMBULATORY HEALTH CARE, INC. SURVEY COMMENTS SAVANNAH RIVER SITE OCCUPATIONAL MEDICINE PROGRAM

Introduction

As part of the normal survey process, the AAAHC provides detailed evaluation results to the site. The AAAHC results include a rating (i.e., substantially compliant, partially compliant, or non-compliant) for each of the applicable standards. The standards published in the "Accreditation Association Handbook for Ambulatory Health Care" describe organizational characteristics that AAAHC believes to be essential for high-quality patient care. For those standards that are partially compliant or non-compliant, the surveyor provides written comments about the observed weakness.

The AAAHC report for the SRS consisted of approximately 130 pages of completed evaluation forms, which include supporting comments. The AAAHC also identified a set of potential improvements that would strengthen the SRS medical program and correct weaknesses noted during the survey. The Office of Oversight developed the following summary of the AAAHC comments. The actual survey results will be provided to the WSRC Medical Director for review and comment.

AAAHC Assessment

The SRS occupational medicine program was in substantial compliance in seven of 13 standards determined to be applicable to the AAAHC accreditation process. The areas of substantial compliance included:

- Quality of care provided
- Clinical records
- Professional improvement
- Immediate/urgent care services
- Pharmaceutical services
- Pathology and medical laboratory services
- Diagnostic imaging services.

The areas of partial compliance included:

- Rights of patients
- Governance
- Administration
- Facilities and environment
- Occupational health services.

The Quality Management and Improvement area was judged to be non-compliant based on the AAAHC survey. More specifically, the peer review and quality improvement sections of the

Quality Management and Improvement area were judged to be non-compliant while the risk management section of Quality Management and Improvement was determined to be partially compliant.

General AAAHC Comments

The survey team indicated that the organizational structure of the ESH&QA organization, in which the medical director is under the direct line management control, fosters the needed interplay of disciplines (such as industrial hygiene, health physics, and safety). However, there is room for improved communications among the various disciplines.

WSRC and DOE/SR management indicated that accreditation may be superfluous, time consuming, and not helpful in fulfilling the medical department's mission. They indicated that accreditation may not be a priority in view of the years of budget reductions.

The medical department provides a multiplicity of services as required by DOE. It is having to prioritize and reorganize tasks as budgets have been cut in the last several years and as budget cuts continue. Traditional services provided by the medical department have been impacted. A significant amount of physician time is consumed performing non-occupational activities. Policies from Human Resources have significantly impacted the medical department.

The medical department has a sophisticated occupational medicine program. The only way for the SRS medical department to accomplish their vision, which is "to be recognized by our customers and our peers as the leader in occupational health programs," is to develop a system to meet the evolving standards of care in occupational medicine. The workers, former workers, and the public are increasingly demanding such quality and accountability because of the potential hazards on the site.

Rights of Patients

Privacy of nurse assessments needs to be improved. Conversations can be overheard in an adjacent cubicle.

Human Resources has policies and procedures for employees. However, policies to address patient rights should be explored by medical or HR personnel.

The grievance system produced only one complaint in the past year. The low rate of grievances raises questions about whether the grievance system is adequately communicated and working as intended.

Governance

In view of the demands placed on the medical department as the budgets have been cut, it was not clearly evident that senior management at WSRC and DOE/SR understands the complexity of the occupational medicine program.

There is no documented methodology for prioritizing and evaluating reductions in service. There is no formalized methodology to evaluate practice patterns or outcomes.

Communication of information among industrial hygiene organizations, line management, and the medical department is not flowing as freely as needed. Relevant industrial hygiene data needs to be linked to individual employees so that the physician can better understand work histories and exposure and so that the company is better prepared to defend itself against litigation.

The SRS organization has policies addressing both Occupational Safety and Health Administration and American Disabilities Act requirements. However, there is no policy addressing the rights of patients.

SRS does not have an effective process for verifying state license requirements.

Administration

The two-way flow of communication between various organizations (i.e., industrial hygiene, line management, and the medical department) needs improvement.

Reinstituting a periodic patient survey should be considered. The very low rate of complaints/grievances may be partially attributed to the absence of a periodic patient survey.

Quality of Care

Based on chart reviews, in some cases non-occupational care is not demonstrating good history documentation and differential diagnosis. Vital signs are not routinely performed on visits as a basic standard of care.

Quality Management and Improvement

Quality Management and Improvement, which is a critical activity, is not being performed in any formalized fashion. Any physician quality management activity is performed on an ad hoc basis. The various components of the self-assessment process are excellent sources of ancillary data. The professional and administrative staff should understand, support, and participate in quality management and improvement programs through an organized mechanism responsible to the governing bodies.

The medical department FY 1999 self-assessment plan has seven sub-units but does not address the most critical discipline (i.e., the physician self-assessment of quality care issues). The self-assessment indices and resulting reports are not true records of quality management/quality improvement activities. Findings of quality improvement activities should be incorporated into educational activities. Quality management/quality improvement records should be maintained. There was no clear evidence that physicians, other that the medical director, had input into quality activities.

Training and education in risk management should be provided to all staff within the organization.

Clinical Records

The supervisor of medical records has significant prior hospital experience and thus Joint Commission of Accreditation of Healthcare Organizations (JACHO) hospital accreditation experience. Some of the self-assessment indices that are related to medical records are excellent.

The surveyor suggests any relevant exposure data be flagged by permanent marker on the inside flap of the record.

The comprehensive clinical record should reflect the significant past exposure and critical problem lists. If no allergies are present it should be noted as "no known allergy."

SRS has a system in place for transferring patients from the site to local hospitals.

Professional Improvement

The performance appraisals for physicians include a goal for continuing medical education. South Carolina recently established a requirement for continuing medical education to maintain a license. There is a policy in place for attendance at offsite educational events. There is a concern that continued budget cuts could result in curtailing the offsite continuing medical education program.

Facilities and Equipment

SRS demonstrates a very high level of attention to safety. For example, potential safety problems associated with hard surfaces (i.e., floors) were resolved by obtaining rubber mats to soften the surface.

All examination rooms, dressing rooms, and reception rooms should be constructed and maintained in a manner that ensures privacy. Adjoining cubicles do not offer sufficient privacy, as conversations in one cubicle can be readily heard in adjoining cubicles.

Pharmacy Services

SRS stores and dispenses very little medication in-house. Narcotics are stored in double-locked boxes and records are maintained.

Medical staff report that they communicate potential medication side effects. However, medical staff do not routinely document their actions to inform patients of side effects.

Pathology and Laboratory Services

Clinical laboratory improvement act certification was documented. The Laboratory has excellent quality control.

Diagnostic Imaging

A radiologist reads all x-rays once every two weeks and will perform emergency readings on request.

Occupational Health Services

Charts lack data about work demands or exposures. Charts do not have industrial hygiene data. Routine occupational health histories are not maintained. Exposure data is not available to the examiner at the time they see patients/employees.

Return-to-work evaluations on injury care do not include comments on work environment or work demands. Preventative counsel is not documented on charts. Surveillance exams do not include information of current or past exposures.

The 1999 AAAHC Occupational Health Services standard has a section on emergency preparedness. The SRS medical organization should consider holding regular meetings with local emergency department staff to ensure readiness.